5

10

15

20

## What is claimed is:

1. A system for synchronizing data records between a network data server and a requesting client device comprising:

a client software application;

a network server software application;

characterized in that the client application maintains a first table of unique identifiers for data records stored at the client and sends a copy of the table with a request for data from the server, and the server maintains a second table of unique identifiers for candidate data records to be sent to the client, the identifiers at server and client formed by a common process, and in that the server, on receiving the request and first table from the client, compares the first table and the second table, then sends to the client only those records indicated by the comparison as new to the client and a notification of table updates.

- 2. The system of claim 1 wherein the network is the Internet network.
- 3. The system of claim 1 wherein the identifiers are value pairs computed by a common function from header and body portions of data records.
- 4. The system of claim 3 wherein the function used for creating identifiers is a cyclic redundancy check (CRC) function.
- 5. The system of claim 1 wherein the client updates the first table each time the client receives records and notification of table updates, and sends the updated table the next time data is requested.

6. The system of claim 1 wherein the requesting client device is a handheld portable device coupled to a host computer connected to the network, and the client software application executes on either or both of the portable device and the host computer.

5

7. The system of claim 6, wherein formation of identifiers is accomplished at the host computer.

10

8. The system of claim 1 further comprising an application program interface (API) enabling applications on the requesting client device to recognize and associate tabled identifiers with stored data records, displaying the records appropriately upon a user request.

15

- 9 A method for synchronizing data records between a network data server and a requesting client device comprising the steps of:
- (a) maintaining a first table of unique identifiers for data records stored at the client;
- (b) sending a copy of the first table with a data request to the network server;

20

- (c) maintaining a second table of unique identifiers for candidate data records to be sent to the client;
- (d) comparing the first table with the second table to determine which requested records are, in fact, new records not already at the client device; and

(e) sending only those records that are new to the client.

25

10. The method of claim 9 further comprising a step for sending a notification of the difference in the tables to the client.

15

- 11. The method of claim 9 wherein the network is the Internet network.
- 12. The method of claim 9 wherein the identifiers are value pairs computedby a common function from header and body portions of data records.
  - 13. The method of claim 12 wherein the function used for creating identifiers is a cyclic redundancy check (CRC) function.
- 14. The method of claim 10 wherein the client updates the first table each time the client receives records and notification of table differences, and sends the updated table the next time data is requested.
  - 15. The method of claim 9 wherein the requesting client device is a handheld portable device coupled to a host computer connected to the network, and the client functions execute on either or both of the portable device and the host computer.
- 16. The method of claim 15, wherein formation of identifiers is
  accomplished at the host computer by a cyclic redundancy check process.